

REMARKS

In response to the final Official Action of February 23, 2005, amendment has been made to claims 1 and 8 which is believed to avoid any potential ambiguity in these claims and which is believed to distinguish these claims over the art cited in the Official Action. It is believed that the amendment of these claims does not raise new issues and therefore should be entered in this amendment after final.

More particularly, the Examiner at pages 2-3 of the Official Action rejects claims 1-22 as anticipated in view of US patent, 6,316,996, Puotiniemi. The Examiner states on page 2, lines 15-17 that "The signal inputs (IN+, IN-) does not have information associated with the inputs such as data indicating modulation in the technical sense." Claims 1 and 8 have been amended to particularly point out that the signal inputs contain information. Support for this amendment can be found throughout the specification and, in particular, Figure 3 which shows a block diagram of a typical GSM-EDGE type transmitter for wireless communications and Figure 4 being directed to the stacked modulator 24 and automatic gain control amplifier 30 comprising circuit arrangement 36 (see page 4, lines 18-24). Clearly, in any GSM transmitter such as shown in Figures 1, 2 and 3, the digital/analog converter 20 converts information which is to be transmitted from the digital form to the analog form for ultimate transmission by the transmitter. For there not to be information presented to the digital analog converter would be nonsensical. This conclusion is also supported by original claim 12 which states that the digital/analog converter converts digital information into an analog signal input. Thus, it is clear that the inputs referred to in claims 1 and 8 contain information which is to be modulated by the modulator.

As set forth in applicant's amendment filed on November 12, 2004, the mixer shown in Puotiniemi is used to generate new frequencies by multiplying a bandpass signal by a periodic signal to obtain a new center frequency. Thus, even if as the Examiner points out with reference to US patent, 6,768,391, Dent et al, modulators can be referred to as mixers or multipliers, this does not controvert applicant's assessment that Puotiniemi does not show modulation of an input signal containing information in a manner as presented in amended claims 1 and 8. It is clear from the disclosure in

Puotiniemi that the mixer shown in Figure 4 is for purposes of multiplying a bandpass signal by a periodic signal to obtain a new center frequency (see column 3, lines 12-16). Thus, the V1 and V2 inputs represent respectively a bandpass signal and a periodic signal which are to be mixed, thereby generating a new center frequency. It is receiver 16 which contains the mixer which is described with reference to Figure 4 at column 3, lines 44-59. Thus, although a mixer is shown in Figure 4 which has an amplifier associated therewith, this circuitry does not suggest the use of a modulator having inputs for a receipt of signal inputs containing information and an automatic gain control amplifier operatively connected to the modulated output current signals of the modulator so that the output current signals are reused by the AGC amplifier. There is no discussion of such in Puotiniemi and there is no motivation provided in Puotiniemi for using the circuitry shown in Figure 4 for purposes of a circuit arrangement as disclosed and claimed in amended claims 1 and 8 herein. Indeed, Puotiniemi is directed to an adjustable AC load structure which provides an adjustable AC gain output and which in Figure 2 shows a block diagram of a cellular mobile station including a modulator 14A as described at column 2, lines 30-33. If the circuitry in receiver 16 therein disclosed was to be used for purposes of the modulator 14A, there would clearly be reference to that in Puotiniemi. No such reference or suggestion is made in Puotiniemi since the circuitry shown in Figure 4 is for adjusting the AC load structure rather than for providing a circuit arrangement for combining a modulator in an automatic gain control amplifier wherein the modulator has inputs for receipt of signal inputs containing information and wherein the output current signals are reused by the AGC amplifier.

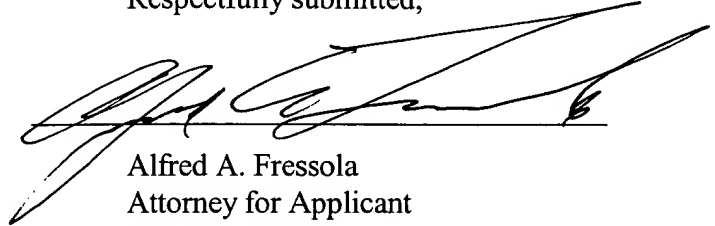
It is therefore respectfully submitted that claims 1 and 8 as amended are neither disclosed nor suggested by Puotiniemi and therefore these claims and the dependent claims thereto (claims 2-7, 10, 11 with regard to claim 1, and claim 9 with regard to claim 8) are also distinguished over Puotiniemi.

Regarding claim 12, it is believed that this claim is also distinguished over Puotiniemi since it specifically states that the digital analog converter 20 is for converting digital information into an analog signal input. Therefore, there is information in the analog signal input and, for reasons as presented above, claim 12 is believed to be distinguished over Puotiniemi. Therefore, dependent claims 13-22 are also believed to be distinguished over Puotiniemi.

In view of the foregoing, it is respectfully submitted that the present application is in condition for allowance and such action is earnestly solicited.

Respectfully submitted,

Dated: April 6, 2005

A handwritten signature in black ink, appearing to read 'Alfred A. Fressola', is written over a horizontal line.

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